



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,736	03/25/2004	James M. Hayes		8184

31083 7590 01/30/2007  
THOMTE, MAZOUR & NIEBERGALL, L.L.C.  
2120 S. 72ND STREET, SUITE 1111  
OMAHA, NE 68124

EXAMINER
----------

SINGH, RAMNANDAN P

ART UNIT	PAPER NUMBER
----------	--------------

2614

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/809,736

Applicant(s)

HAYES ET AL.

Examiner

Ramnandan Singh

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-20, 22-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on Nov. 14, 2006 have been fully considered but they are not persuasive.

(i) Applicant's argument---"Neither Suhm et al nor Dans teach systems that are operative to actively prompt callees in the process of classifying lists of telephone numbers, which is how claim 1 specifically claims that the software is operatively configured". On page 10.

Examiner's response---Examiner respectfully disagrees. Dans teaches using an interactive voice response (IVR) system (14) that generates verbal messages and actively prompts a callee in the process of classifying telephone numbers [Figs. 1, 4; col. 4, line 58 to col. 5, line 5; col. 6, lines 45-54; col. 9, lines 34-67]. Further, Dans teaches using a number of software [col. 8, line s17-46]. For more details, Applicant is directed to the rejection of claim 1 as set forth in this Office action.

(ii) Applicant's argument---"As such there is no suggestion or motivation, ether in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references as claimed by the examiner" on pages 10-11.

Examiner's response--- In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation

to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Suhm et al suggests that a speech recognition system may be included in the interactive voice response (IVR) system 1202 to enable the program to run interactively in response to the callee's spoken words [col. 14, lines 43-45].

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dans [US 6,195,417 B1].

Regarding claim 1, Dans teaches a system (10) for automatically classifying a list of telephone numbers into one or more categories (i.e. banks) shown in Figs. 1, 6 [col. 4, line 58 to col. 5, line 5], the system comprising:

a processor (i.e. scheduler 128) [col. 5, lines 36-52] ;

a data storage medium (126) for at least temporarily storing the list of telephone numbers on a line within the telephone network [col. 13, lines 31-58]; and

the software operative on the processor to:

- a) initiate a *first series of calls* to telephone numbers from the list of telephone numbers on a line within the telephone network [col. 5, line 60 to col. 6, line 4; Fig. 2];
- b) play an audible message over the line that requests a specific response from a callee on the line [Figs. 1-2; col. 3, line 59 to col. 4, line 8; col. 4, line 58 to col. 5, line 28; col. 13, line 65 to col. 15, line 34];
- c) receive and identify audible sounds (or messages) on the line after the audible message is played using an interactive voice response (IVR) (14) and voice recognition software [col. 6, line 21 to col. 8, line 46; Figs. 2, 6]; and
- d) assign one or more of the categories (i.e. banks) to each of the telephone numbers according to the audible sounds [col. 8, line 47 to col. 9, line 33; col. 11, line 37 to col. 13, line 29; Figs. 1-6].

Regarding claim 2, Dans further teaches the system, wherein the software is further operative on the processor to create a data file (i.e. state machine 40) comprising the telephone numbers and the identity of the category (i.e. bank) assigned to each of the telephone numbers [Fig. 1; col. 5, line 60 to col. 6, line 32; col. 10, line 47 to col. 11, line 35].

Regarding claim 3, Dans further teaches the system, wherein the software is operative on the processor to generate reports based on the data file (i.e. state machine 40) [col. 11, lines 16-35].

Regarding claim 19, Dans further teaches the system wherein said software is further operative on said processor to at least temporarily store said audible sounds received over said line on said data storage medium prior to identifying said audible sounds [Fig. 6; col. 13, lines 51-58].

Regarding claim 20, Dans further teaches the system wherein said software is further operative on said processor to complete said call after receiving and storing said audible sounds but prior to identifying said audible sounds [col. 14, lines 15-23].

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 5-7, 10-18, 22-24, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dans as applied to claim 1 above, and further in view of Chou [US 6,850,602 B1].

Regarding claim 5, although Dans teaches using an interactive voice response (IVR) (14) and voice recognition engine (48) [col. 6, line 21 to col. 8, line 46; Fig. 2], he does not teach expressly using audible message request that the callee terminate the call.

Application/Control Number: 10/809,736

Page 6

Art Unit: 2614

Chou teaches a method for detection of an answering machine in an automatic dialing system having an interactive voice response (IVR), wherein using an audible message, Chou is able to terminate the call either by using the automatic dialing system or a callee [Figs. 1a thru 1d, col. 2, lines 29-49; col. 4, line 42 to col. 5, line 8; col. 6, lines 47-54; col. 11, lines 39-52].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Chou with Dans in order to enable the IVR to system to disengage and terminate the call when the IVR system determines that the destination is a machine [Chou; col. 1, lines 39-41].

Regarding claims 6-7, Chou further teaches the system, wherein the software is further operative to the processor to classify the telephone numbers as live answered (i.e. agent) or not live-answered (i.e. machine) [Figs. 1g, 2-6, 7a-7b; col. 6, lines 1-54].

Regarding claim 10, Chou further teaches the system, as shown in Fig. 6,  
1 wherein the software (i.e. scheduler) is further operative on the processor to initiate calls  
to the not live-answered telephone numbers on a line within the telephone network and  
receive audible sounds on the line [Figs 1a, . 6; ; col.3, line 33 to col. 4, line 41; col. 5,  
5 lines 9-41; col. 6, lines 47-54].

Regarding claim 11, Chou further teaches the system, wherein the software is further operative on the processor to compare the audible sounds to one or more known audible sounds to sub-classify the not live-answered telephone numbers [Figs. 4-5; col. 8, line 62 to col. 9, line 67].

Regarding claim 12, Chou further teaches the system, wherein the known audible sounds are comprised of at least portions of spoken messages [Fig. 3c]

15

Regarding claim 13, Dan further teaches the system, wherein the spoken messages are comprised of separate messages advising that a telephone number is disconnected, has been changed, or is privacy blocked.[Fig. 6; col. 14, lines 38-67].

Regarding claim 14, Dans further teaches the system, wherein the spoken messages are comprised of separate messages advising that all circuits are busy or that an area code has changed [col. 14, lines 54-62; col. 15, lines 15-17].

20        Regarding claim 15, Chou further teaches the system , wherein the spoken messages are comprised of common corporate and answering system greetings (i.e.

25



predefined expression) [Fig. 7b]. .

1           Regarding claim 16, Dans further teaches the system , wherein the software is  
further operative on the processor to identify and classify a telephone number from  
which audible sounds are received that are not similar to the one or more known audible  
sounds [col. 14, lines 15-37].

5  
10           Regarding claim 17, Dans further teaches the system, wherein the software  
is further operative on the processor to create a data file comprising the not answered  
telephone numbers and a sub-classification for each of the not live-answered telephone  
numbers based on the one or more known audible sounds [col. 15, line 50 to col. 16,  
line 3].

15  
25           Regarding claim 18, Dans further teaches the system , wherein the software is  
further operative on the processor to generate reports based on the data file [col. 16,  
lines 4-14].

Regarding claim 22, Chou further teaches the system, wherein said audible message requests that a callee on said line terminate said call [Fig. 1d; col. 11, line 39-52].

Regarding claims 23-24, Chou further teaches the system, wherein the software is further operative to the processor to classify the telephone numbers as live answered or not live-answered [Figs. 1g, 24, 67a-7b].

Regarding claim 27, Chou further teaches the system, wherein the software is further operative on the processor to compare the audible sounds to one or more known audible sounds to sub-classify the not live-answered telephone numbers [Fig. 6].

Regarding claim 28, Chou further teaches the system, wherein the known audible sounds are comprised of at least portions of spoken messages [Fig. 4].

- 15 6. Claims 8-9, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable  
20 over Dans as applied to claims 1, 20 above, and further in view of Brown et al [US  
20030086541 A1].

Regarding claim 8, Dans does not teach expressly the system wherein the

software is further operative on the processor to identify standard information tones (SIT) on line after initiating the calls.

Brown et al teach a tone detector (203) to detect SIT tones on line after initiating the calls [Figs. 3C, 5; Para: 0035].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Brown et al with Dans in order to classify audio samples based on the identification of tones [Brown et al; Para: 0035].

Regarding claim 9, Brown et al further teach classifying the telephone numbers as not live-answered (i.e. recorded voice) when the Sit is identified [Para: 0002].

Regarding claim 25, Dans does not teach expressly the system wherein the software is further operative on the processor to identify standard information tones (SIT) on line after initiating the calls.

Brown et al teach a tone detector (203) to detect SIT tones on line after initiating the calls [Figs. 3C, 5; Para: 0035].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Brown et al with Dans in order to classify audio samples based on the identification of tones [Brown et al; Para: 0035].

Regarding claim 26, Brown et al further teach classifying the telephone numbers as not live-answered (i.e. recorded voice) when the Sit is identified [Para: 0002].

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(i) Shaffer et al [US 5,848,131 A] teach classifying telephone numbers using voice recognition and voice response unit (VRU) 1046 [col. 32, line 50 to col. 33, line 28; col. 35, lines 10-33; claims 7, 11, 56];

Wabg [US 5,596,679 A] teaches identifying spoken sounds using a speech-recognition system [Figs. 2-10; Abstract];

(iii) Cadiz et al {US 20040235520 A1} teach using an enhanced computer user interface allowing user interaction [Abstract; Figs. 1-19]; and

(iv) Kelly, Jr. [US 4,941,168 A].

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh  
Examiner  
Art Unit 2614

A handwritten signature in black ink, appearing to read 'R Singh', with a long horizontal line underneath.